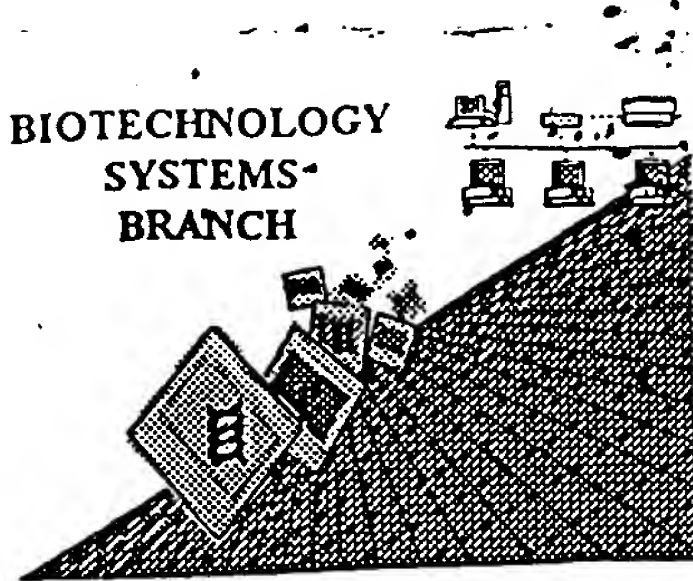


Re-run

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/719261

Source: PCT

Date Processed by STIC: 08 30 2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

### Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 09/719261

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos  
The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length  
The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering  
The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII  
The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 ✓ Variable Length.  
Sequence(s) 5 contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"  
A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)         . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences  
    (OLD RULES)  
Sequence(s)          missing. If intentional, please insert the following lines for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
This sequence is intentionally skipped  
  
Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences  
    (NEW RULES)  
Sequence(s)          missing. If intentional, please insert the following lines for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 9      Use of n's or Xaa's  
    (NEW RULES)  
Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10      Invalid <213>  
    Response  
Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11      Use of <220>  
Sequence(s)          missing the <220> "Feature" and associated numeric identifiers and responses.  
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0  
    "bug"  
Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13      Misuse of n  
n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

AMC/MH - Biotechnology Systems Branch - 08/21/2001

may  
The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

U

Sequence

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PCT09

## RAW SEQUENCE LISTING

DATE: 08/30/2001

PATENT APPLICATION: US/09/719,261

TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt

Output Set: N:\CRF3\08302001\I719261.raw

Does Not Comply  
Corrected Diskette Needed

4 <110> APPLICANT: Istituto Di Ricerche Di Biologia Molecolare P. Angeletti SpA  
 5 Matassa, Victor  
 6 Narjes, Frank  
 7 Koehler, Konrad  
 8 Ontoria, Jesus  
 9 Poma, Marco

11 <120> TITLE OF INVENTION: Peptide inhibitors of hepatitis C virus NS3 protease  
 13 <130> FILE REFERENCE: KMN/FP5780044  
 15 <140> CURRENT APPLICATION NUMBER: 09/719,261  
 C--> 16 <141> CURRENT FILING DATE: 2001-07-23  
 18 <150> PRIOR APPLICATION NUMBER: PCT/GB99/01824  
 19 <151> PRIOR FILING DATE: 1999-06-09  
 21 <150> PRIOR APPLICATION NUMBER: GB 9812523.0  
 22 <151> PRIOR FILING DATE: 1998-06-10  
 24 <160> NUMBER OF SEQ ID NOS: 13  
 26 <170> SOFTWARE: PatentIn Ver. 2.1  
 29 <210> SEQ ID NO: 1  
 30 <211> LENGTH: 4  
 31 <212> TYPE: PRT  
 32 <213> ORGANISM: Artificial Sequence  
 34 <220> FEATURE:  
 35 <221> NAME/KEY: SITE  
 36 <222> LOCATION: (1)  
 37 <223> OTHER INFORMATION: Xaa is diphenylalanine  
 39 <220> FEATURE:  
 40 <221> NAME/KEY: SITE  
 41 <222> LOCATION: (3)  
 42 <223> OTHER INFORMATION: Xaa is cyclohexylalanine  
 44 <220> FEATURE:  
 45 <221> NAME/KEY: SITE  
 46 <222> LOCATION: (4)  
 47 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid  
 49 <220> FEATURE:  
 50 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic ✓  
 51 sequence  
 53 <400> SEQUENCE: 1  
 W--> 54 Xaa Glu Xaa Xaa  
 55 1  
 59 <210> SEQ ID NO: 2  
 60 <211> LENGTH: 6  
 61 <212> TYPE: PRT  
 62 <213> ORGANISM: Artificial Sequence  
 64 <220> FEATURE:  
 65 <221> NAME/KEY: SITE  
 66 <222> LOCATION: (6)  
 67 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid  
 69 <220> FEATURE:

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001  
TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt  
Output Set: N:\CRF3\08302001\I719261.raw

70 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
71 sequence  
73 <400> SEQUENCE: 2  
W--> 74 Asp Glu Met Glu Glu Xaa  
75 1 5  
78 <210> SEQ ID NO: 3  
79 <211> LENGTH: 6  
80 <212> TYPE: PRT  
81 <213> ORGANISM: Artificial Sequence  
83 <220> FEATURE:  
84 <221> NAME/KEY: SITE  
85 <222> LOCATION: (3)  
86 <223> OTHER INFORMATION: Xaa is diphenylalanine  
88 <220> FEATURE:  
89 <221> NAME/KEY: SITE  
90 <222> LOCATION: (5)  
91 <223> OTHER INFORMATION: Xaa is cyclohexylalanine  
93 <220> FEATURE:  
94 <221> NAME/KEY: SITE  
95 <222> LOCATION: (6)  
96 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid  
98 <220> FEATURE:  
99 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
100 sequence  
102 <400> SEQUENCE: 3  
W--> 103 Asp Glu Xaa Glu Xaa Xaa  
104 1 5  
107 <210> SEQ ID NO: 4  
108 <211> LENGTH: 6  
109 <212> TYPE: PRT  
110 <213> ORGANISM: Artificial Sequence  
112 <220> FEATURE:  
113 <221> NAME/KEY: SITE  
114 <222> LOCATION: (3)  
115 <223> OTHER INFORMATION: Xaa is diphenylalanine  
117 <220> FEATURE:  
118 <221> NAME/KEY: SITE  
119 <222> LOCATION: (5)  
120 <223> OTHER INFORMATION: Xaa is cyclohexylalanine  
122 <220> FEATURE:  
123 <221> NAME/KEY: SITE  
124 <222> LOCATION: (6)  
125 <223> OTHER INFORMATION: Xaa is a fluorinated hydrocarbon side chain  
127 <220> FEATURE:  
128 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
129 sequence  
131 <400> SEQUENCE: 4  
W--> 132 Asp Glu Xaa Glu Xaa Xaa  
133 1 5

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001  
TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt  
Output Set: N:\CRF3\08302001\I719261.raw

136 <210> SEQ ID NO: 5  
137 <211> LENGTH: 6  
138 <212> TYPE: PRT  
139 <213> ORGANISM: Artificial Sequence  
141 <220> FEATURE:  
142 <221> NAME/KEY: SITE  
143 <222> LOCATION: (6)  
144 <223> OTHER INFORMATION: Xaa is a fluorinated hydrocarbon side chain  
146 <220> FEATURE:  
147 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
148 sequence  
150 <400> SEQUENCE: 5  
W--> 151 Asp Glu Met Glu Glu Xaa  
152 1 5  
155 <210> SEQ ID NO: 6  
156 <211> LENGTH: 5  
157 <212> TYPE: PRT  
158 <213> ORGANISM: Artificial Sequence  
160 <220> FEATURE:  
161 <221> NAME/KEY: SITE  
162 <222> LOCATION: (1)  
163 <223> OTHER INFORMATION: Asp as tertiary butyl ester  
165 <220> FEATURE:  
166 <221> NAME/KEY: SITE  
167 <222> LOCATION: (2, 4, 5)  
168 <223> OTHER INFORMATION: Glu as tertiary butyl ester  
170 <220> FEATURE:  
171 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
172 sequence  
174 <400> SEQUENCE: 6  
175 Asp Glu Met Glu Glu  
176 1 5  
179 <210> SEQ ID NO: 7  
180 <211> LENGTH: 5  
181 <212> TYPE: PRT  
182 <213> ORGANISM: Artificial Sequence  
184 <220> FEATURE:  
185 <221> NAME/KEY: SITE  
186 <222> LOCATION: (1)  
187 <223> OTHER INFORMATION: Asp as tertiary butyl ester  
190 <220> FEATURE:  
191 <221> NAME/KEY: SITE  
192 <222> LOCATION: (2, 4)  
193 <223> OTHER INFORMATION: Glu as tertiary butyl ester  
195 <220> FEATURE:  
196 <221> NAME/KEY: SITE  
197 <222> LOCATION: (3)  
198 <223> OTHER INFORMATION: Xaa is diphenylalanine  
200 <220> FEATURE:

may  
The type of errors shown exist throughout  
the Sequence Listing. Please check subsequent  
sequences for similar errors.

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001

TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt

Output Set: N:\CRF3\08302001\I719261.raw

201 <221> NAME/KEY: SITE  
 202 <222> LOCATION: (5)  
 203 <223> OTHER INFORMATION: Xaa is cyclohexylalanine  
 205 <220> FEATURE:  
 206 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 207 sequence  
 209 <400> SEQUENCE: 7  
 W--> 210 Asp Glu Xaa Glu Xaa  
 211 1 5  
 214 <210> SEQ ID NO: 8  
 215 <211> LENGTH: 17  
 216 <212> TYPE: PRT  
 217 <213> ORGANISM: Artificial Sequence  
 219 <220> FEATURE:  
 220 <221> NAME/KEY: MOD\_RES  
 221 <222> LOCATION: (17)  
 222 <223> OTHER INFORMATION: AMIDATION  
 224 <220> FEATURE:  
 225 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 226 sequence.  
 228 <400> SEQUENCE: 8  
 229 Lys Lys Lys Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser Gly  
 230 1 5 10 15  
 232 Arg  
 235 <210> SEQ ID NO: 9  
 236 <211> LENGTH: 13  
 237 <212> TYPE: PRT  
 238 <213> ORGANISM: Artificial Sequence  
 240 <220> FEATURE:  
 241 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 242 sequence  
 244 <400> SEQUENCE: 9  
 245 Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Lys  
 246 1 5 10  
 249 <210> SEQ ID NO: 10  
 250 <211> LENGTH: 4  
 251 <212> TYPE: PRT  
 252 <213> ORGANISM: Artificial Sequence  
 254 <220> FEATURE:  
 255 <221> NAME/KEY: SITE  
 256 <222> LOCATION: (1)..(3)  
 257 <223> OTHER INFORMATION: Phenylalanines are linked by an ether bond  
 259 <220> FEATURE:  
 260 <221> NAME/KEY: SITE  
 261 <222> LOCATION: (4)  
 262 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid  
 264 <220> FEATURE:  
 265 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 266 sequence

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001  
TIME: 09:46:14

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt  
Output Set: N:\CRF3\08302001\I719261.raw

268 <400> SEQUENCE: 10  
W--> 269 Phe Glu Phe Xaa  
270 1  
273 <210> SEQ ID NO: 11  
274 <211> LENGTH: 6  
275 <212> TYPE: PRT  
276 <213> ORGANISM: Artificial Sequence  
278 <220> FEATURE:  
279 <221> NAME/KEY: SITE  
280 <222> LOCATION: (3)  
281 <223> OTHER INFORMATION: Xaa is diphenylalanine  
283 <220> FEATURE:  
284 <221> NAME/KEY: SITE  
285 <222> LOCATION: (5)  
286 <223> OTHER INFORMATION: Xaa is cyclohexylalanine  
288 <220> FEATURE:  
289 <221> NAME/KEY: SITE  
290 <222> LOCATION: (6)  
291 <223> OTHER INFORMATION: Xaa is 3-amino-5,5-difluoro-pentanoic acid  
293 <220> FEATURE:  
294 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
295 sequence  
297 <400> SEQUENCE: 11  
W--> 298 Asp Glu Xaa Glu Xaa Xaa  
299 1 5  
302 <210> SEQ ID NO: 12  
303 <211> LENGTH: 5  
304 <212> TYPE: PRT  
305 <213> ORGANISM: Artificial Sequence  
307 <220> FEATURE:  
308 <221> NAME/KEY: SITE  
309 <222> LOCATION: (2)  
310 <223> OTHER INFORMATION: Xaa is diphenylalanine  
312 <220> FEATURE:  
313 <221> NAME/KEY: SITE  
314 <222> LOCATION: (4)  
315 <223> OTHER INFORMATION: Xaa is cyclohexylalanine  
317 <220> FEATURE:  
318 <221> NAME/KEY: SITE  
319 <222> LOCATION: (5)  
320 <223> OTHER INFORMATION: Xaa is 4,4-difluoro-2-amino butyric acid  
322 <220> FEATURE:  
323 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
324 sequence  
326 <400> SEQUENCE: 12  
W--> 327 Glu Xaa Ile Xaa Xaa  
328 1 5  
331 <210> SEQ ID NO: 13  
332 <211> LENGTH: 6



## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/719,261

DATE: 08/30/2001

TIME: 09:46:15

Input Set : A:\Mewburn-Matassa ('261) Sequence Listing.txt

Output Set: N:\CRF3\08302001\I719261.raw

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1

L:74-M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2

L:103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3

L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5

L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10

L:298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11

L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12

L:356 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13